SEQUENCE LISTING

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      TSUKAHARA, Tomohide
      NABETA, Yuki
      KAWAGUCHI, Satoshi
      IKEDA, Hideyuki
      WADA, Takuro
      YAMASHITA, Toshihiko

<120> TUMOR ANTIGEN PROTEIN AND USE THEREOF

<130> 0020-5360PUS1

<140> US 10/529,000
<141> 2005-03-24

<150> PCT/JP03/12037
<151> 2003-09-19

<150> JP 2002-282345
<151> 2002-09-27

<160> 55

<170> PatentIn Ver. 2.1

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Glu Gly Ala Ala Pro Gln Pro Phe Thr Thr Ser Asp Asp Thr Pro Cys
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Gly Gln Glu Cys Thr Gly Leu Val Glu Gln His Ser Trp Met Glu Gly
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Gln Val Thr Val Trp Leu Leu Glu Gln Lys Leu Gln Val Cys Cys Arg
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Val Glu Glu Val Trp Leu Ala Glu Leu Gln Gly Pro Cys Pro Gln Ala
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Pro Pro Leu Glu Pro Gly Ala Gln Ala Leu Ala Tyr Arg Pro Val Ser
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Arg Asn Ile Asp Val Pro Lys Arg Lys Ser Asp Ala Val Glu Met Asp
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Glu Met Met Ala Ala Met Val Leu Thr Ser Leu Ser Cys Ser Pro Val
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Val Gln Ser Pro Pro Gly Thr Glu Ala Asn Phe Ser Ala Ser Arg Ala
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Ala Cys Asp Pro Trp Lys Glu Ser Gly Asp Ile Ser Asp Ser Gly Ser
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Ser Pro Pro His Pro Gln Ala Ser Pro Lys Tyr Leu Gly Asp Ala Phe
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Gly Ser Pro Gln Thr Asp His Gly Phe Glu Thr Asp Pro Asp Pro Phe
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Leu Leu Asp Glu Pro Ala Pro Arg Lys Arg Lys Asn Ser Val Lys Val
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acc cca gtc cct ggg act ccc acc tcc gag cca gct ccc acc ccc agc   1410
Thr Pro Val Pro Gly Thr Pro Thr Ser Glu Pro Ala Pro Thr Pro Ser
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Gly Ala Leu Ser Lys Ser Ala Pro Gly Ser Phe Trp His Ile Gln Ala
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gat cat gca tac cag gct ctg cca tcc ttc cag atc cca gtc tca cca    1602
Asp His Ala Tyr Gln Ala Leu Pro Ser Phe Gln Ile Pro Val Ser Pro
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His Ile Tyr Thr Ser Val Ser Trp Ala Ala Ala Pro Ser Ala Ala Cys
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Ser Leu Ser Pro Val Arg Ser Arg Ser Leu Ser Phe Ser Glu Pro Gln
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Arg Ala Gln Ser Gly Ala Arg Lys Ala Arg Gly Glu Ala Lys Lys Cys
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Arg Lys Val Tyr Gly Ile Glu His Arg Asp Gln Trp Cys Thr Ala Cys
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Arg Trp Lys Lys Ala Cys Gln Arg Phe Leu Asp
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gccctcagca gaaaccgaaa gagaaagaac ggaaacacgg agtttgggct ctgttggcta  2008
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Ser Asp Asp Thr Pro Cys Gln Glu Gln Pro Lys Glu Val Leu Lys Ala
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Pro Ser Thr Ser Gly Leu Gln Gln Val Ala Phe Gln Pro Gly Gln Lys
65                  70                  75                  80
Val Tyr Val Trp Tyr Gly Gly Gln Glu Cys Thr Gly Leu Val Glu Gln
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His Ser Trp Met Glu Gly Gln Val Thr Val Trp Leu Leu Glu Gln Lys
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Leu Gln Val Cys Cys Arg Val Glu Glu Val Trp Leu Ala Glu Leu Gln
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Ile Ser Asp Ser Gly Ser Ser Thr Thr Ser Gly His Trp Ser Gly Ser
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Ser Gly Val Ser Thr Pro Ser Pro Pro His Pro Gln Ala Ser Pro Lys
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<223> Synthetic peptide derived from SEQ ID NO: 2 that can
      be recognized by CTLs when bound to HLA-A24 antigen

<400> 40
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<210> 41
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<212> PRT
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<220>
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<400> 41
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<210> 42
<211> 10
<212> PRT
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<210> 43
<211> 10
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<400> 43
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<210> 44
<211> 10
<212> PRT
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<220>
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<400> 44
Ala Ala Ala Pro Ser Ala Ala Cys Ser Leu
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<210> 45
<211> 10
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<400> 45
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<210> 46
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<223> HLA-B55-restricted tumor antigen peptide

<400> 46
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<210> 47
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<210> 48
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Thr Ala Cys Arg Trp Lys Lys Ala Cys
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Ala Cys Arg Trp Lys Lys Ala Cys Gln
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<210> 50
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<210> 51
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<400> 51
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<210> 52
<211> 10
<212> PRT
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<210> 53
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<400> 53
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 1               5                   10


<210> 54
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<220>
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<210> 55
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